AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

LISTING OF CLAIMS:

Claim 1. (Withdrawn) An isolated DNA comprising a nucleotide sequence coding for an enzyme having enone reductase activity wherein the enzyme is characterized by the following physico-chemical properties:

(a) molecular mass: 61,300±5,000 Da

(estimated using gel filtration, consisting of one subunit);

(b) co-factor: NADPH and NADH;

(c) substrate specificity: active on α,β-unsaturated ketons;

(d) optimum temperature: 55-60° C. at pH 7.4; and

(e) optimum pH: pH 4.5-8.5.

Claim 2. (Withdrawn) The isolated DNA according to claim 1, wherein said nucleotide sequence is selected from the group consisting of:

(a) a nucleotide sequence coding for a polypeptide having the amino acid sequence shown in SEQ ID NO:2;

(b) a nucleotide sequence coding for an allelic variant of the polypeptide having the amino acid sequence shown in SEQ ID NO:2; and

(c) a nucleotide sequence coding for a polypeptide having the amino acid sequence shown in SEQ ID NO:2, in which one or more amino acids are added, inserted, deleted and/or substituted but having the enone reductase activity.

Claim 3. (Withdrawn) The isolated DNA according to claim 1, wherein said nucleotide sequence is selected from the group consisting of:

(a) a nucleotide sequence represented in SEQ ID NO:1;

(b) a nucleotide sequence encoding an enone reductase having the amino acid sequence encoded by the nucleotide sequence shown in SEQ ID NO: 1;

(c) a nucleotide sequence which hybridizes to the complement of the nucleotide sequence of (a) or (b) under stringent hybridizing conditions; and

(d) a nucleotide sequence which is at least 80% identical to the nucleotide sequence of (a).

Claim 4. (Withdrawn) A vector or a plasmid comprising the DNA of claim 1.

Claim 5. (Withdrawn) A host cell transformed or transfected by the DNA of claim 1 or the vector or the plasmid of claim 4.

Claim 6. (Withdrawn) A polypeptide encoded by the DNA of claim 1.

Claim 7. (Currently amended) A process for the production of levodione, which comprises contacting ketoisophorone with an enzyme derived from *Candida* or *Zygosaccharomyces* which has enone reductase activity, wherein the enzyme is characterized by the following physico-chemical properties:

(a) molecular mass: 61,300±5,000 Da

(estimated using gel filtration, consisting of one subunit);

(b) co-factor: NADPH and NADH;

(c) substrate specificity: active on α,β-unsaturated ketones;

(d) optimum temperature: 55-60° C at pH 7.4; and

(e) optimum pH: pH 4.5-8.5,

~~the polypeptide of claim 6 under conditions suitable for the production of levodione, e.g.~~ at pH values in the range of from 4.5 to 8.5 and at a temperature in the range of from 10 to 60° C. for 5 minutes to 72 hours~~, or at pH values of from 5.0 to 8.0 and at a temperature range from 20 to 60° C. for 15 minutes to 48 hours~~.

Claim 8. (Withdrawn) A process for the production of levodione, which comprises contacting ketoisophorone with the host cell of claim 5 or a cell-free extract thereof under the conditions suitable for the production oflevodione, e.g. at pH values of from 4.0 to 9.0 and at a temperature range from 10 to 60° C. for 15 minutes to 72 hours, or at pH values of from 5.0 to 8.0 and at a temperature range from 20 to 60° C. for 30 minutes to 48 hours.

Claim 9. (New) The process of claim 7, wherein the ketoisophorone is contacted with the enzyme at pH values in the range of from 5.0 to 8.0 and at a temperature in the range of from 20 to 60° C. for 15 minutes to 48 hours.

Claim 10. (New) The process of claim 7, wherein the enzyme is derived from *Candida*.

Claim 11. (New) The process of claim 10, wherein the enzyme derived from *Candida* is derived from *Candida kefyr*.

Claim 12. (New) The process of claim 11, wherein the enzyme derived from *Candida kefyr* is derived from *Candida kefyr* IFO 0960.

Claim 13. (New) The process according to claim 7, wherein the enzyme is a polypeptide having the amino acid sequence shown in SEQ ID NO: 2 or is encoded by a polynucleotide that is at least 90% identical to a polynucleotide that encodes the polypeptide having the amino acid sequence shown in SEQ ID NO: 2 and has enone reductase activity.

Claim 14. (New) The process according to claim 7, wherein the enzyme is a polypeptide having the amino acid sequence shown in SEQ ID NO: 2.